

REMARKS

Status of the Application

Claims 1-29 are pending in the application and have been examined.

With this Amendment, Applicant has amended claims 1, 3, 5-17, and 19-29. Applicant submits that the amended claims are fully supported by the disclosure. No new matter has been added.

Formalities

Applicant thanks the Examiner for the indication that the drawings filed on December 12, 2005, are accepted.

Claim Rejections

Claims 1-3, 5-17, and 19-29 --- 35 U.S.C. § 102(e)

Claims 1-3, 5-17, and 19-29 have been rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Pat. No. 7,274,661 to Harrell *et al.* ("Harrell"). Applicant traverses this rejection.

Addressing claims 1-3, 16 and 17, Harrell does not disclose or suggest at least a receiver comprising "control means for monitoring an amount of accumulation in said buffer, and sending a predetermined control signal to the transmission path based on a result of the monitoring ... wherein said control signal causes data transmission to switch between previously accumulated data at one bit rate and data generated by real-time encoding at another bit rate," as recited in the claim 1.

Harrell discloses a flow control method in which congestion of the buffer on the client side is *detected by the buffer*. *The client may request service adjustments* from the media server based on the detected congestion of the buffer (column 3, lines 36-53). However, Harrell does not disclose or suggest that *data transmission is switched between previously accumulated data at one bit rate and data generated by real-time encoding at another bit rate based on the control signal from the control means which monitors the amount of accumulation in the buffer*, as required by the claims. Rather, Harrell discloses that *the buffer detects* the level of congestion and *a signal from the client must be generated to make a request for service adjustment to the server, i.e.*, a plurality of service adjustments may be requested. Thus, Harrell does not disclose or suggest a control means which monitors accumulation in the buffer and sends a predetermined control signal, as required by the claim.

With regard to the requested service adjustments, Harrell discloses, for example, packet retransmissions, stream prioritization, stream acceleration, etc. (column 3, lines 36-48). Thus, the system of Harrell must request a specific adjustment when the client side buffer determines that it is congested. Harrell, however, does not suggest that transmission is switched between previously accumulated data at one bit rate and data generated by real-time encoding at another bit rate based on the control signal from the control means which monitors the amount of accumulation in the buffer, as required by the claim.

On the other hand, in exemplary embodiments of the present invention, an amount of data accumulated in the buffer on the receiver side is monitored by a control unit which sends a control signal to the transmitter side. The control signal from the control means which monitors

the amount of accumulation in the buffer causes data transmission by the transmitter side to switch between previously accumulated data at one bit rate and data generated by real-time encoding at another bit rate.

Accordingly, since Harrell does not disclose or suggest at least the above-noted features, claim 1 is patentable over Harrell. Claims 3, 16, and 17 contain features similar to the features recited in claim 1 and are therefore patentable over Harrell for similar reasons. Claim 2 is patentable over Harrell at least by virtue of its dependence from claim 1.

With regard to claim 5-15, Harrell does not disclose or suggest at least a transmitter comprising “an accumulation unit for storing previously accumulated data and data generated by real-time encoding as media signals at different bit rates; switching means for receiving a control signal from a transmission path, and retrieving one of the media signal from said accumulating unit and switching a bit rate of the media signal based on the control signal,” as recited in the claim. As noted above, Harrell discloses a flow control method in which congestion of the buffer on the client side is detected by the buffer, and the client may then request various service adjustments from the media server based on the detected congestion of the buffer. Harrell, however, does not disclose or suggest at least the claimed accumulation unit and switching means, as required by the claims.

The Examiner alleges that Harrell discloses transmitting both audio and video media streams. However, the audio and video media streams disclosed by Harrell are not the “previously accumulated data and data generated by real-time encoding as media signals at

different bit rates” which are stored in the accumulation unit as required by the claims. Thus, Harrell is silent as to these transmitter features.

Therefore, since Harrell does not disclose or suggest all the claimed features, claim 5 is patentable over Harrell. Claims 6-15, and 19-29 contain features similar to the features recited in claim 5 and are therefore patentable over Harrell for similar reasons.

Claims 4 and 18 --- 35 U.S.C. § 103(a)

Claims 4 and 18 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Harrell in view of U.S. Pat. Pub. No. 2004/0186877 to Wang *et al.* ("Wang"). Applicant traverses this rejection.

The Examiner relies on Wang only to allegedly disclose that a control signal is sent to the transmission path when a radio handover occurs. However, Wang does not disclose or suggest the simplified receiver and reception method of claims 3 and 17 from which claims 4 and 18 respectively depend.

Therefore, since the combined references do not disclose or suggest all of the claimed features, claims 4 and 18 are patentable over the combination of Harrell and Wang.

Conclusion


In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.114(c)
U.S. Application No.: 10/560,306

Attorney Docket No.: Q91806

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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